Lung cancer surgical management during the outbreak of Coronavirus Disease 2019

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DOI: https://doi.org/10.1016/j.jtho.2020.03.027

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To the Editor:

The outbreak of 2019 novel coronavirus (coronavirus disease 2019 [COVID-19]) has been declared a pandemic spread by the WHO on March 11, 2020. Some countries have been hit earlier and with lightning violence, leading to the collapse of health facilities and putting public health to test. This epidemiologic and social emergency puts at risk of undertreatment not only patients with acute infections but also health care pathways for other diseases. Diagnostic tests and hospital facilities are largely used for patients with COVID-19, and most resources are invested in this field. Nevertheless, it is our duty, as surgical specialists, not to forget our patients, especially patients with cancer. What is happening to the lung cancer pathways of referral and treatment? For how long do we have to face this emergency? What will be the cost in terms of lung cancer-related death in this scenario?

It is a management and ethics dilemma, and the answer is not easy to find in the absence of evidences.[1]

We established in our Lung Cancer Unit a new risk stratification for lung cancer progression and COVID-19 infection (Table 1). We matched both and elaborated a new integrated stratification risk to prevent adverse outcomes from COVID-19 after oncologic treatment (Table 2).

We promote new therapeutic options on the basis of the integrated classification as follows:

Stage I: Anatomical lung resection, the early stages allow definitive oncologic treatment without the need for further hospital admission or adjuvant treatments (low risk of infection).

Stage IIa: Anatomical lung resection (low risk of infection).

Table 1. New Risk Stratification or Lung Cancer Progression and COVID-19 Infection

	Low	High
Risk of progression	T1 (a-c) N (0-1) T2 (a-b) N (0-1) T3 (N0-1)	Surgical T4 (any N) Surgical N2 (any T) Surgical oligometastasis
Risk of COVID-19	<70 y <2 associated disease	>70 y >2 associated disease; immunosuppression

COVID-19, coronavirus disease 2019.

Table 2. New Integrated Risk Classification

Stage I	Low risk of progression and low risk of COVID-19 infection
Stage IIa	High risk of progression and low risk of COVID-19 infection
Stage IIb	Low risk of progression and high risk of COVID-19 infection
Stage III	High risk of progression and high risk of COVID-19 infection

COVID-19, coronavirus disease 2019.

Stage IIb: Discuss with the patient the possibility of a follow-up (up to 3 mo) before a definitive therapeutic decision after the epidemiologic peak has been overcome. Personalized treatments are evaluated.

Stage III: Consider exclusive nonsurgical treatments.

This algorithm of care tries to balance the risk of dying from cancer with the risk of incurring a potentially fatal infection after major surgery or any oncologic treatment. It is partially evidence-based and mostly on the basis of common sense and on the need for supporting the current emergency without forgetting our patients.

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ISSN: 1556-0864

https://doi.org/10.1016/j.jtho.2020.03.027